Gulf of Mexico Harmful Algal Bloom Bulletin

24 July 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: July 20, 2006

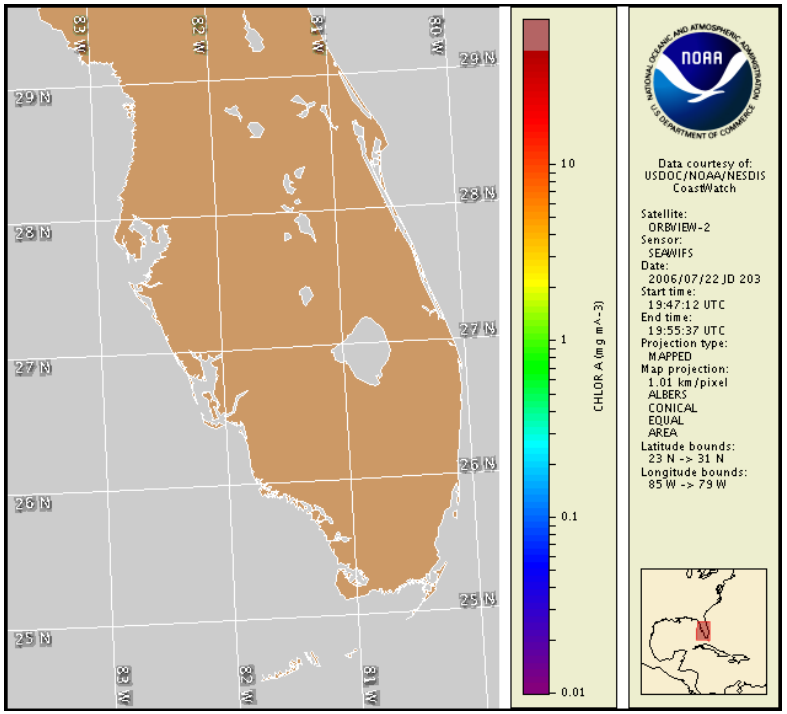
Conditions Report

A harmful algal bloom has been identified in Lee and northern Collier Counties. Patchy low impacts are possible in coastal northern Lee County today through tomorrow evening, with very low impacts possible tomorrow morning. Patchy low to moderate impacts are possible in coastal southern Lee and northern Collier Counties through tomorrow evening, with patchy low impacts Tuesday morning. Patchy very low impacts are possible along the coast from northern Lee to northern Collier County Wednesday and Thursday. Patchy moderate to high impacts expected in the Pine Island Sound and San Carlos Bay regions through Thursday.

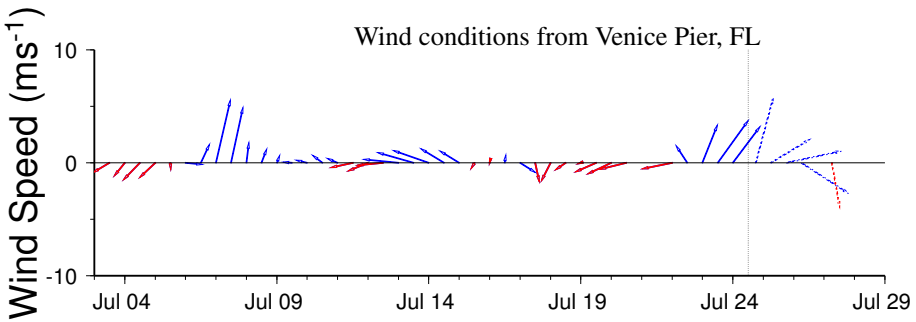
Analysis

The harmful algal bloom persists from northern Lee County to northern Collier County and has intensified in Pine Island Sound and from Fort Myers Beach to Barefoot Beach. Samples indicate high levels of *K. brevis* inside Pine Island Sound from northern Pine Island to Captiva Island, including Captiva Pass, and Redfish Pass (FWRI, 7/19). Medium concentrations of *K. brevis* were detected at Boca Grande Pass, northern Pine Island, and San Carlos Bay (FWRI, 7/19). Medium concentrations were also detected at Big Carlos Pass near Fort Myers Beach, and in Collier County from Wiggins Pass to Clam Pass. Very low levels of *K. brevis* were found in a bottom sample just southwest of Naples, indicating the potential for upwelling to cause bloom intensification in this region. *K. brevis* is present at the surface 4-5 miles west of Boca Grande Pass. Fish kills were reported last week at Fort Myers, Sanibel, and Boca Grande Pass. Recent imagery has been cloudy, hindering identification of bloom extent. Chlorophyll concentrations remain elevated along the coast from Sanibel to Naples (~6-10μg/L). In the previously identified region of elevated chlorophyll south of Sanibel, samples 5 miles west of Fort Myers indicate the presence of diatoms, while nearshore samples contain *K. brevis*. This bloom is mixed offshore. Minimal north-south movement of the bloom is expected over the next couple days. Easterly winds Wednesday through Friday may cause intensification along the coast, and continued transport of the bloom out of the bay regions into coastal regions.

-Allen, Fisher

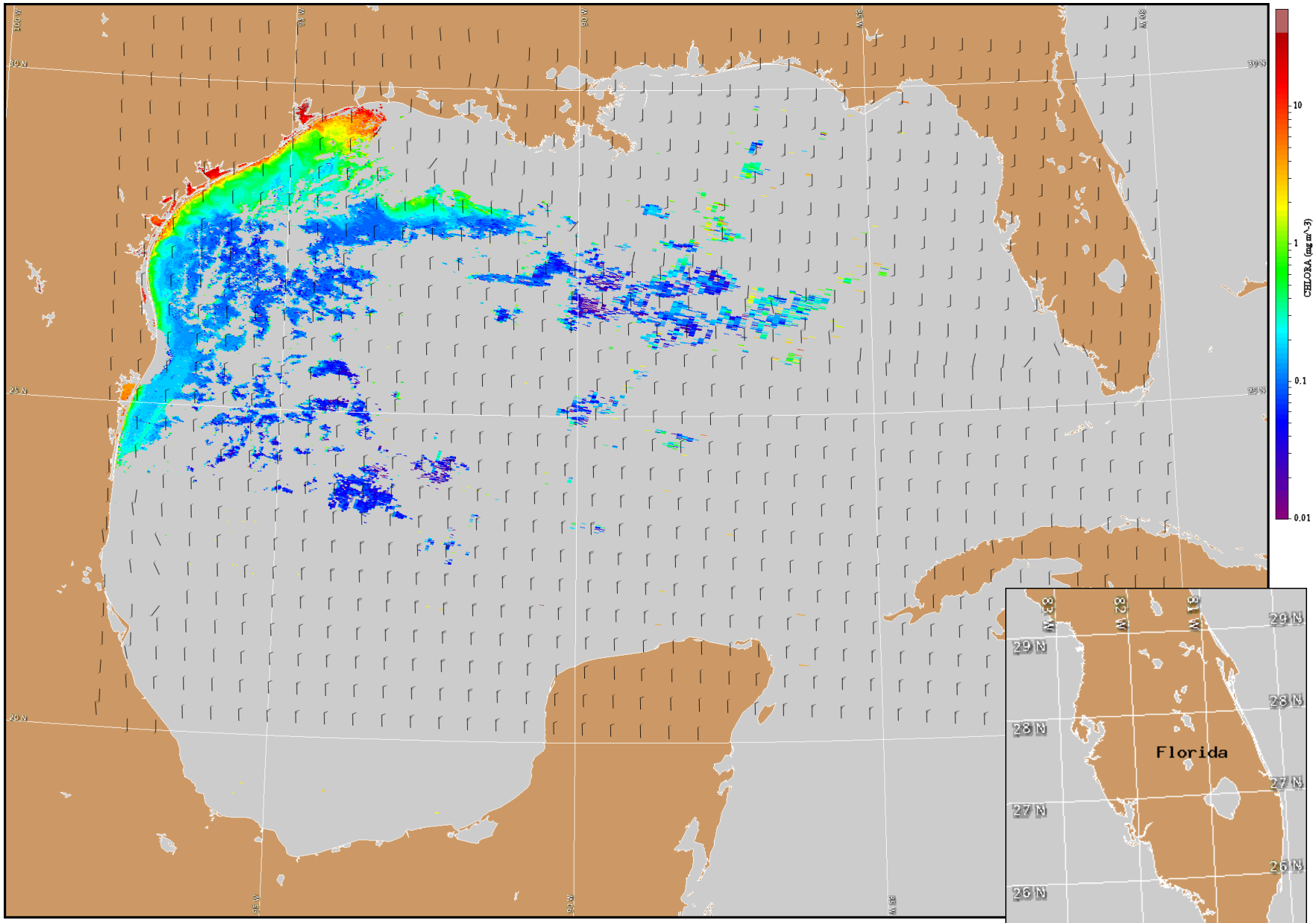


Satellite chlorophyll image with possible HAB areas shown by red polygon(s).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Southwest winds at 10 knots (5 m/s) through tonight, becoming southeast Tuesday morning at 5-10 knots (3-5 m/s). Winds shifting to the northwest Tuesday afternoon, and clocking to the by northeast Tuesday night. Easterly winds Wednesday and Thursday at 10-15 knots (5-8 m/s).



Satellite chlorophyll image and forecast winds for July 25, 2006 06Z.

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).